

Industrialization, Urbanization, and the Conservation Movement

California Education and the Environment Initiative

Approved by the California State Board of Education, 2010

The Education and the Environment Curriculum is a cooperative endeavor of the following entities:

California Environmental Protection Agency
California Natural Resources Agency
Office of the Secretary of Education
California State Board of Education
California Department of Education
California Integrated Waste Management Board

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Key Partners:

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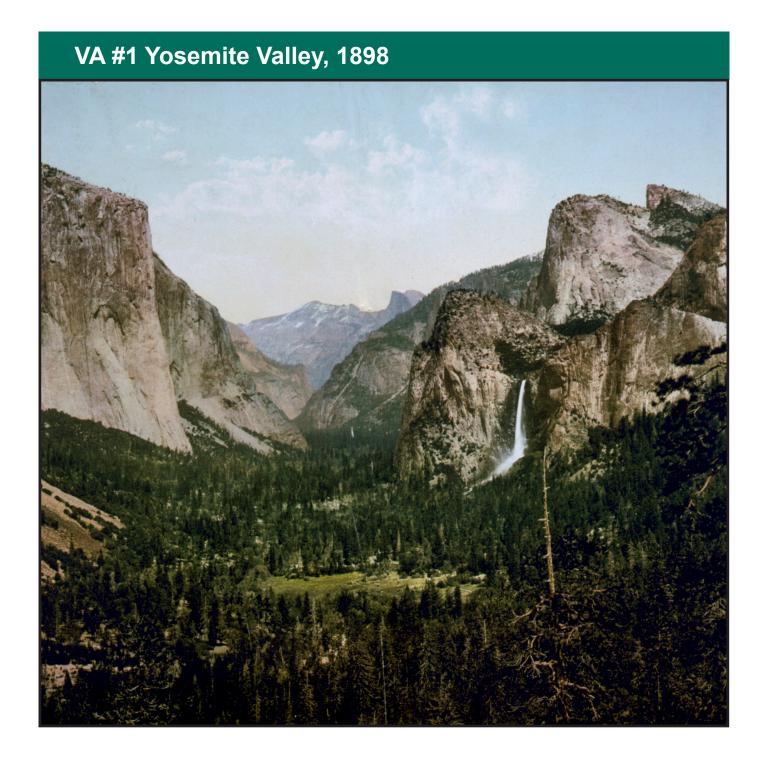
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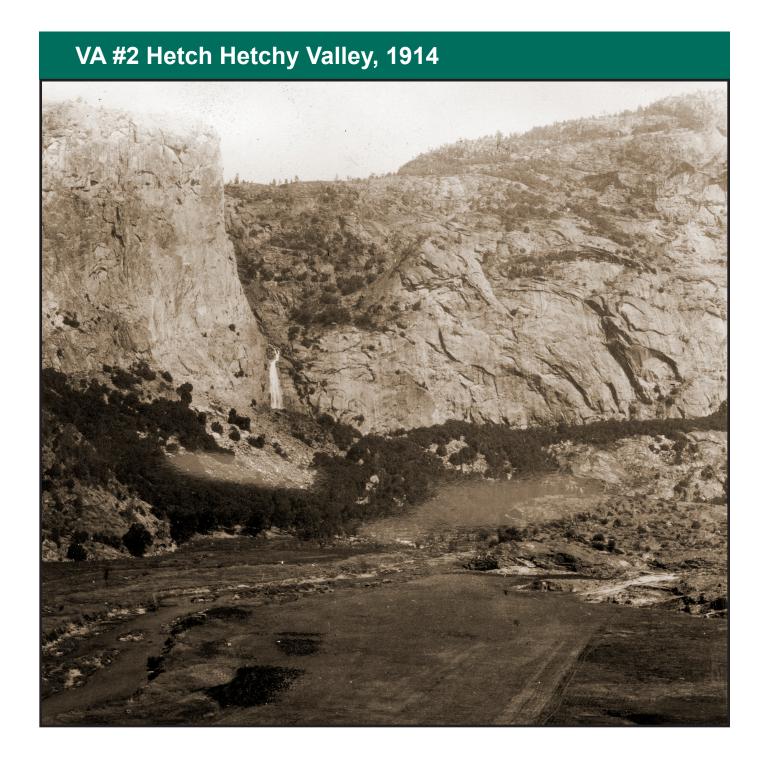
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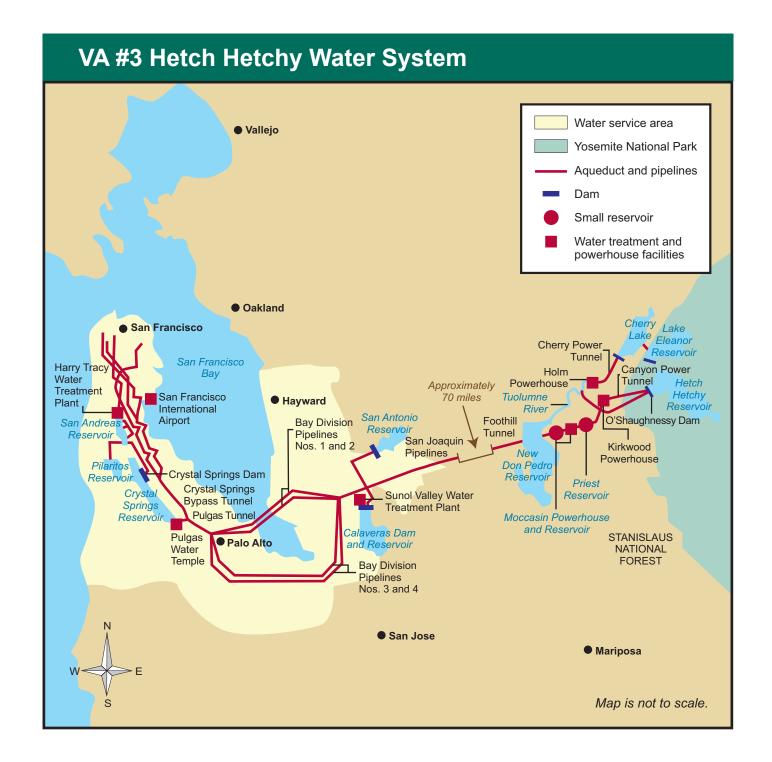


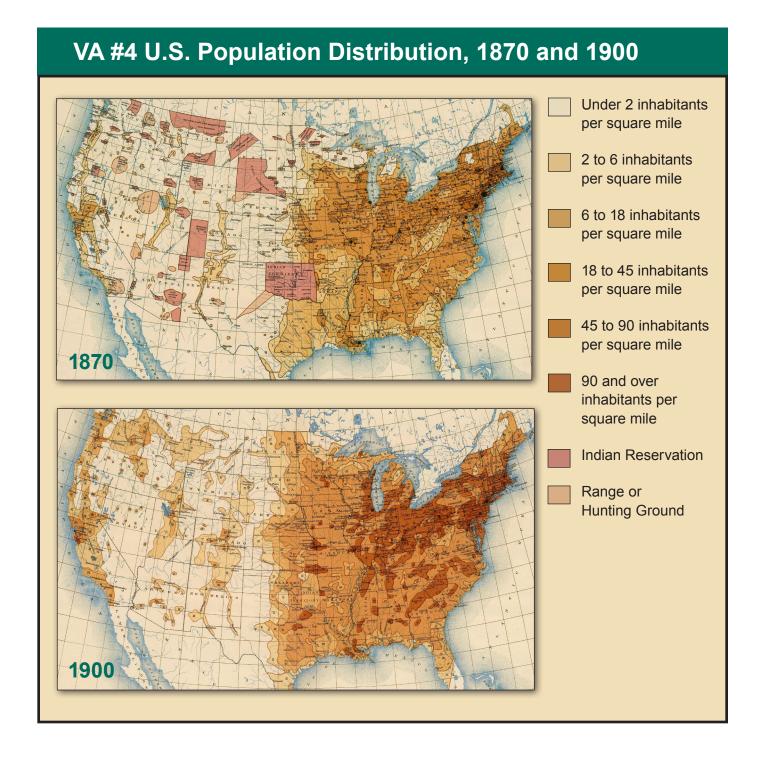
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2	Hetch Hetchy Valley, 1914				
3	Hetch Hetchy Water System				
L	esson 2 The Growth of a City				
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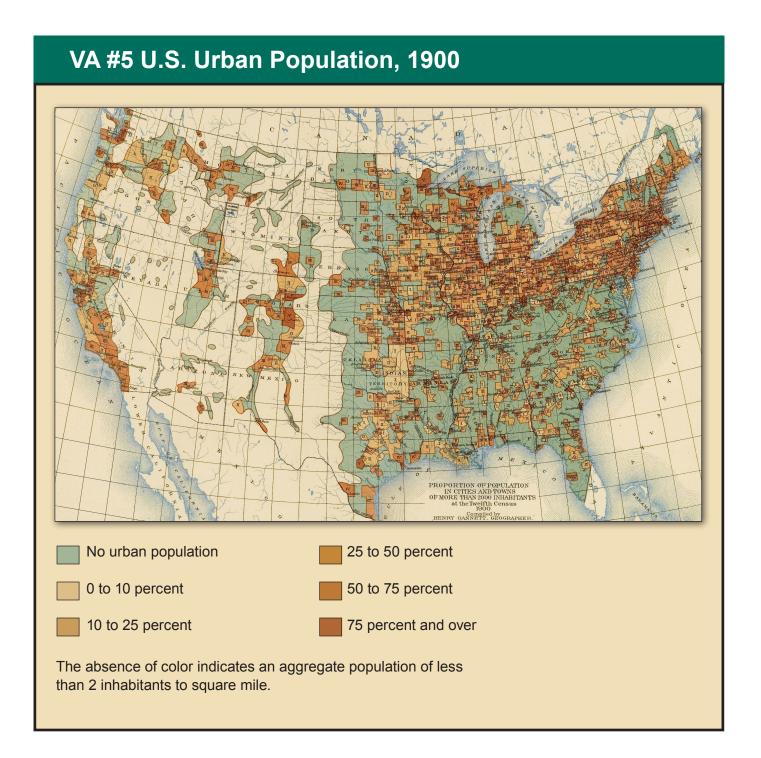
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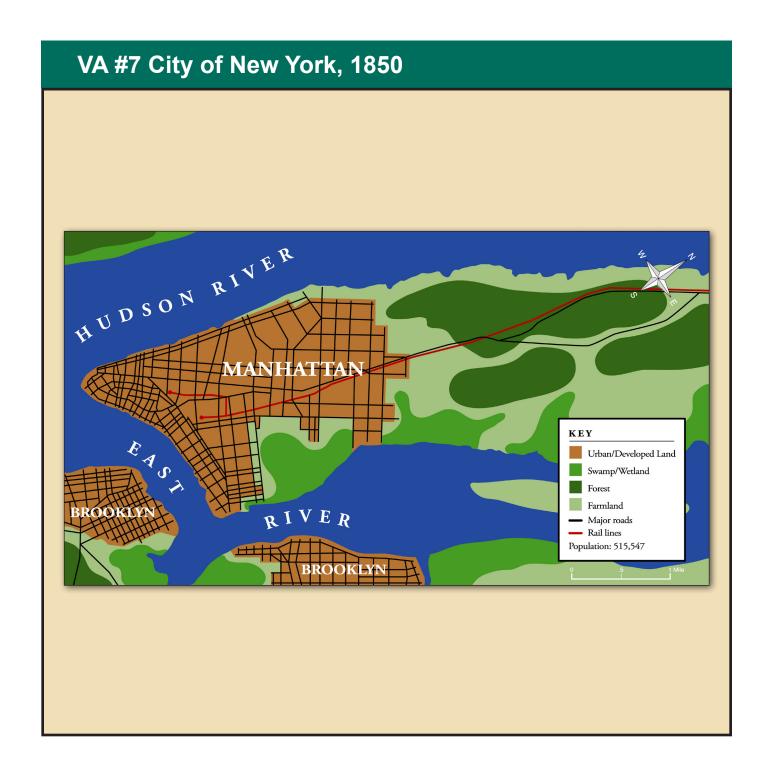


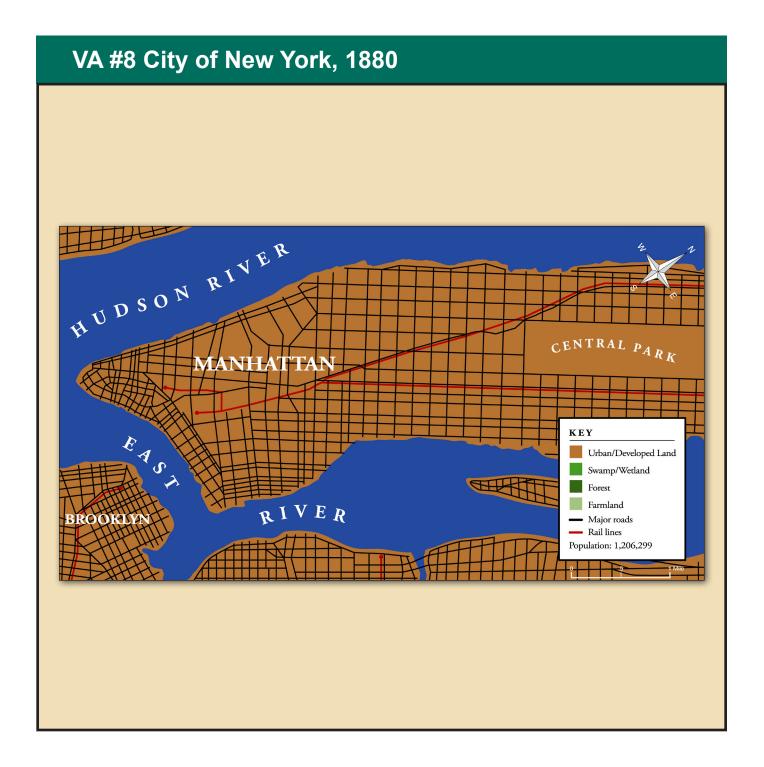


VA #6 Immigration in U.S. Cities, 1890

1890

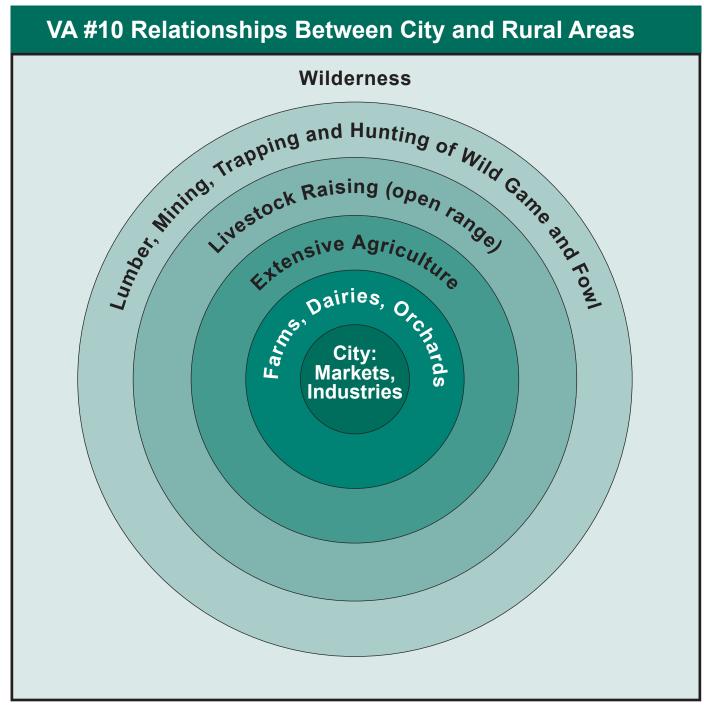
Rank by total	City, State	Total	Native	Foreign-born	
population				Number	Percent
1	New York, New York	1,515,301	875,358	639,943	42.2%
2	Chicago, Illinois	1,099,850	649,184	450,666	41.0%
3	Philadelphia, Pennsylvania	1,046,964	777,484	269,480	25.7%
4	Brooklyn, New York	806,343	544,643	261,700	32.5%
5	St. Louis, Missouri	451,770	336,894	114,876	25.4%
6	Boston, Massachusetts	448,477	290,305	158,172	35.5%
7	Baltimore, Maryland	434,439	365,436	69,003	15.9%
8	San Francisco, California	298,997	172,186	126,811	42.4%
9	Cincinnati, Ohio	296,908	225,500	71,408	24.1%
10	Buffalo, New York	255,664	166,179	89,485	35.0%





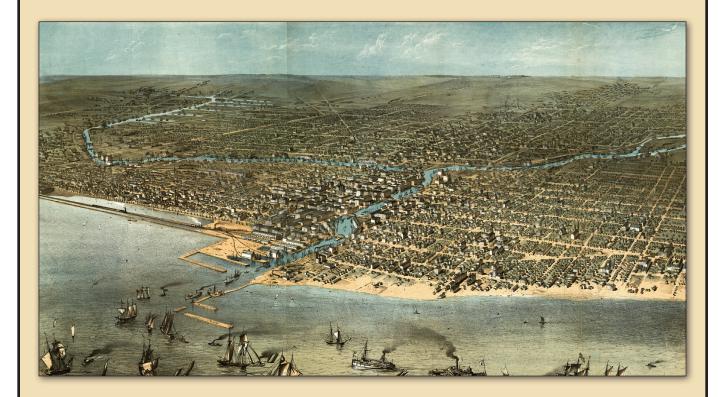
VA #9 Bird's-eye View of New York City, 1892





Based on von Thünen's model of an isolated state.

VA #11 Bird's-eye View of Chicago, 1868

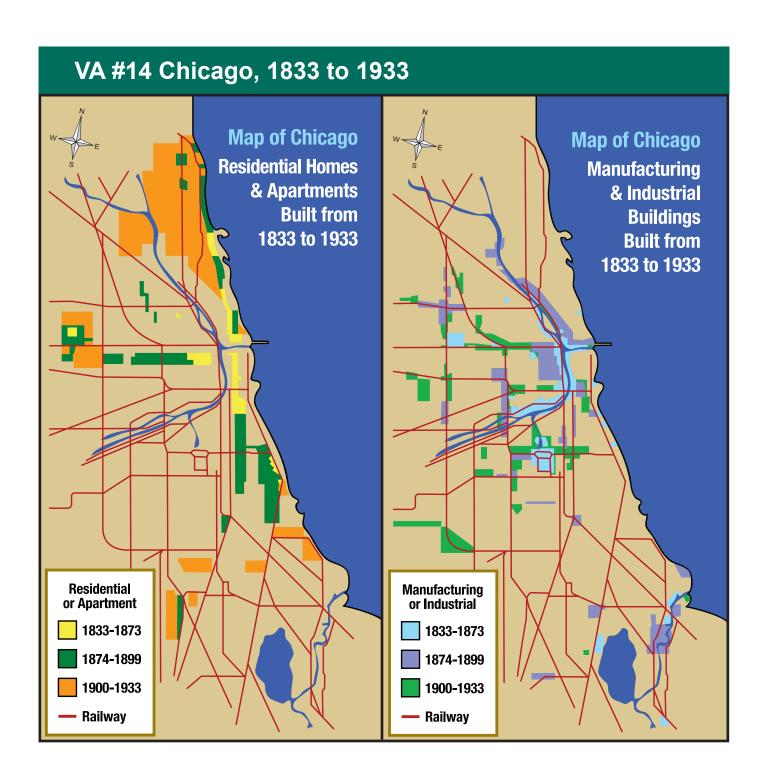


VA #12 Bird's-eye View of Union Stock Yards, 1878

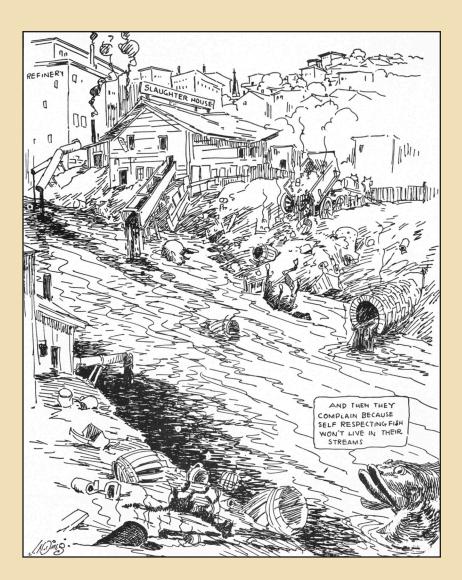


VA #13 Bird's-eye View of Chicago, 1893

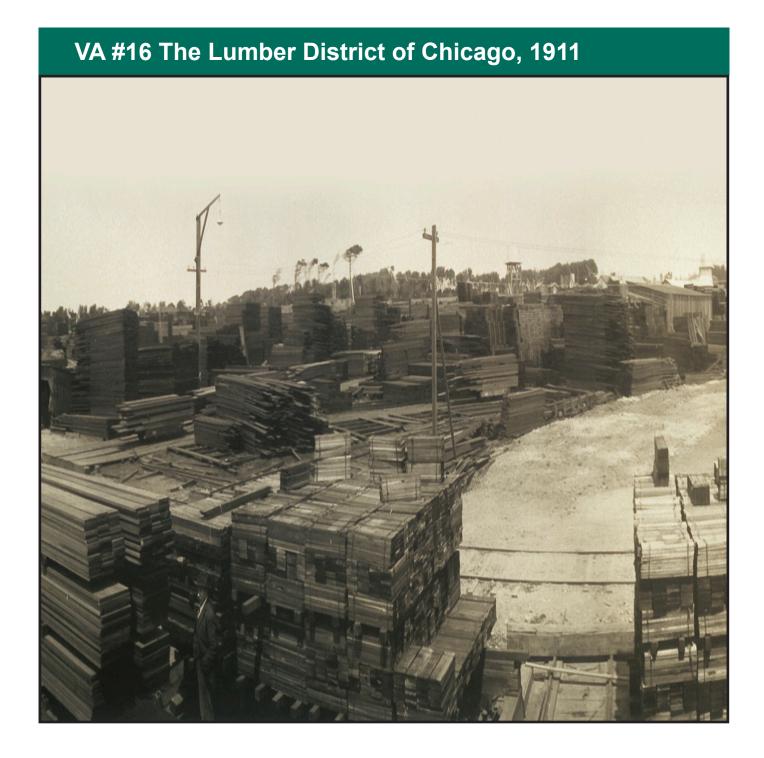




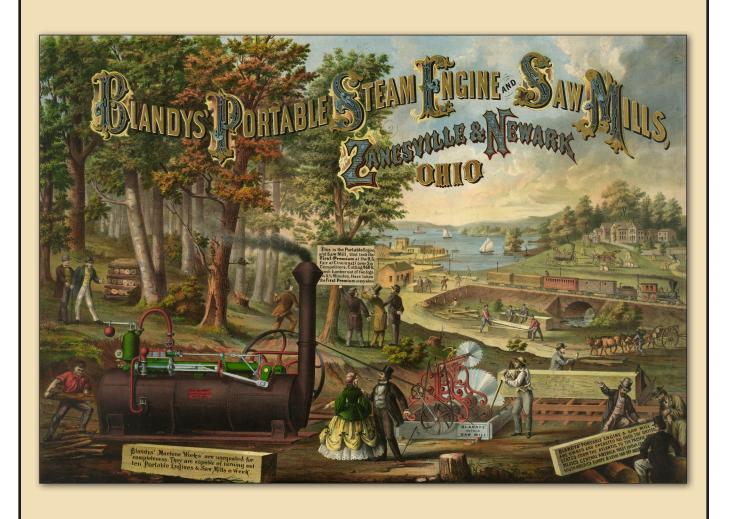
VA #15 "Ding" Darling Cartoon, 1923

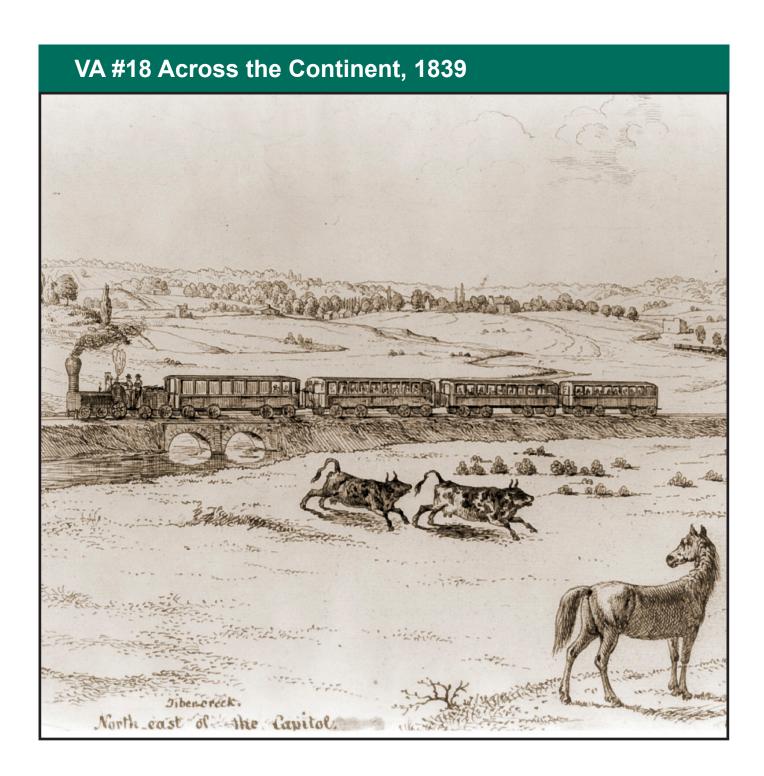


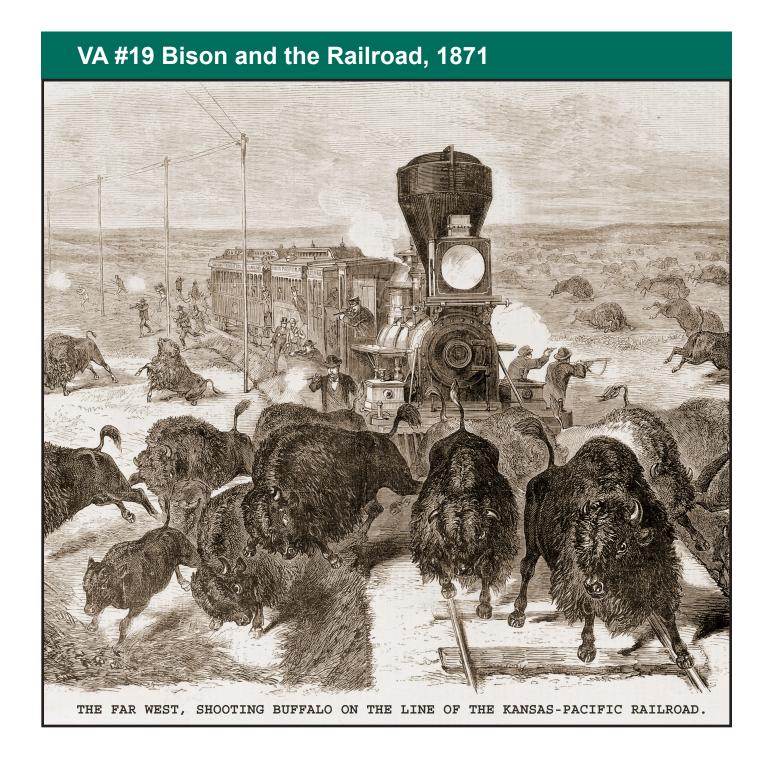
What Man Does To One Of The Most Beautiful Gifts Of Nature—The River

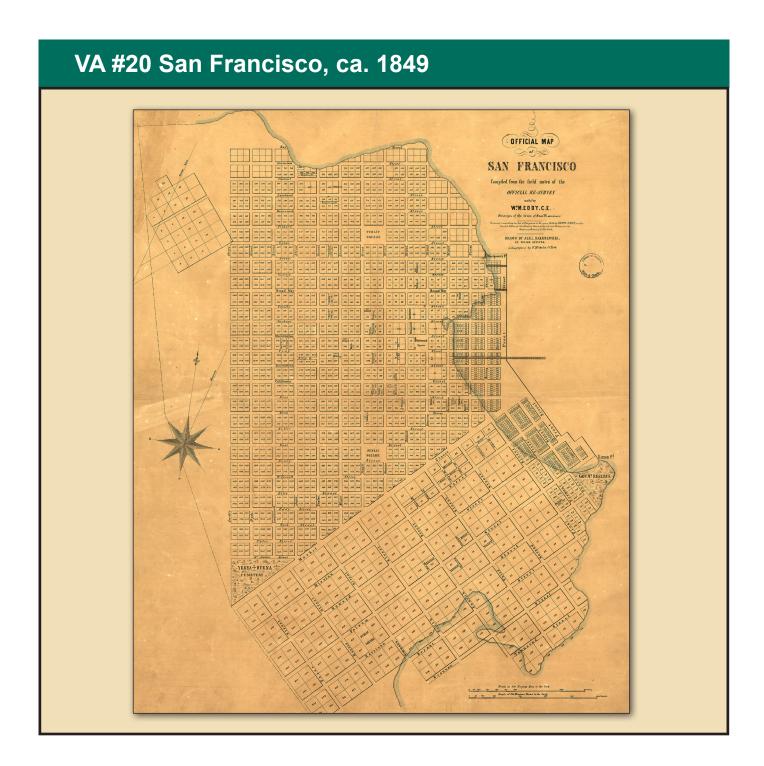


VA #17 Blandy's Portable Steam Engine and Sawmill, 1867

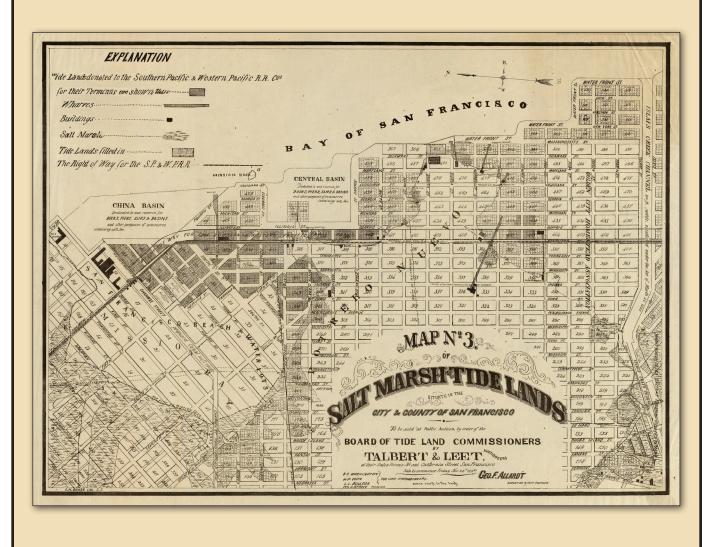


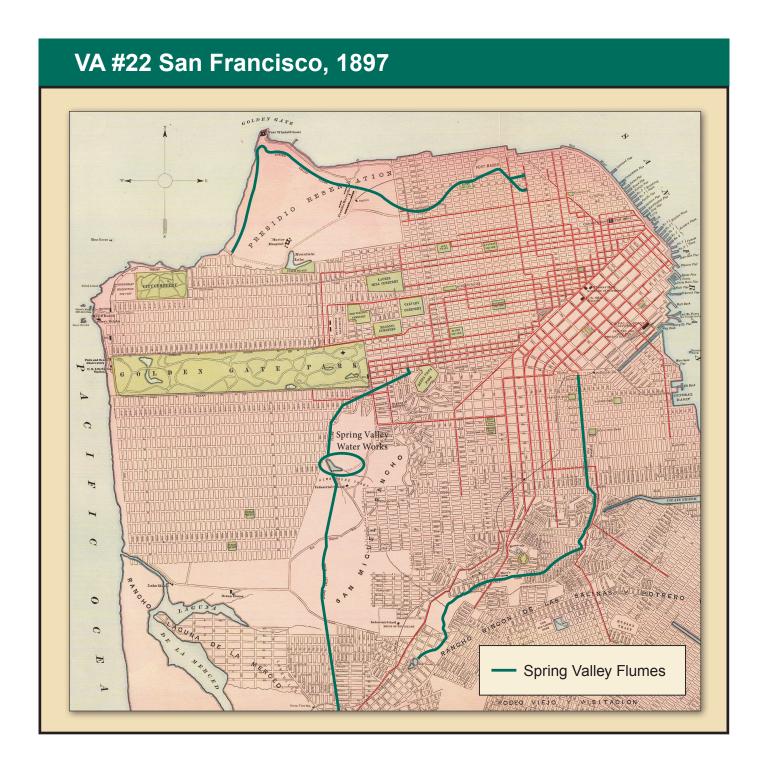


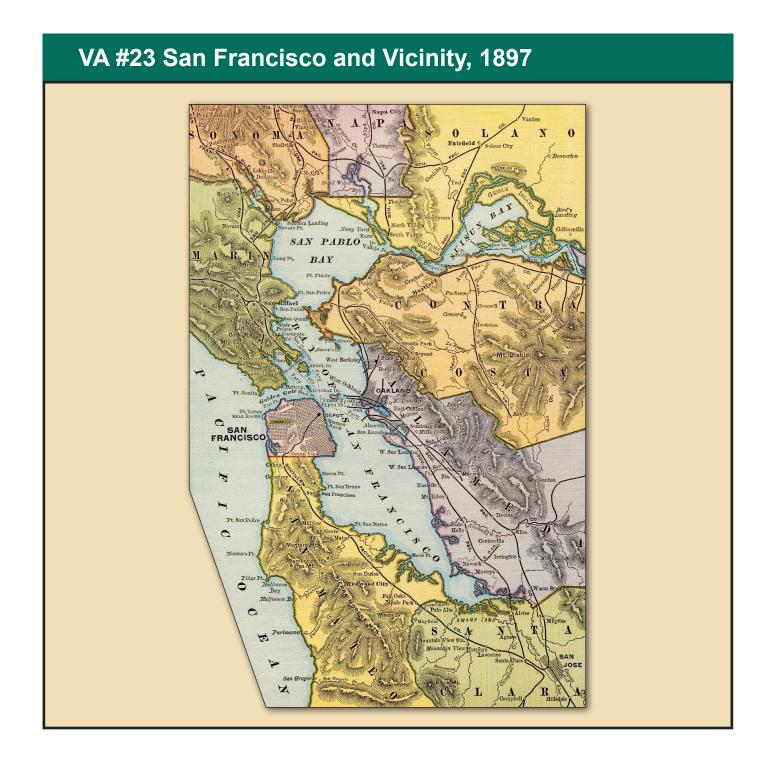


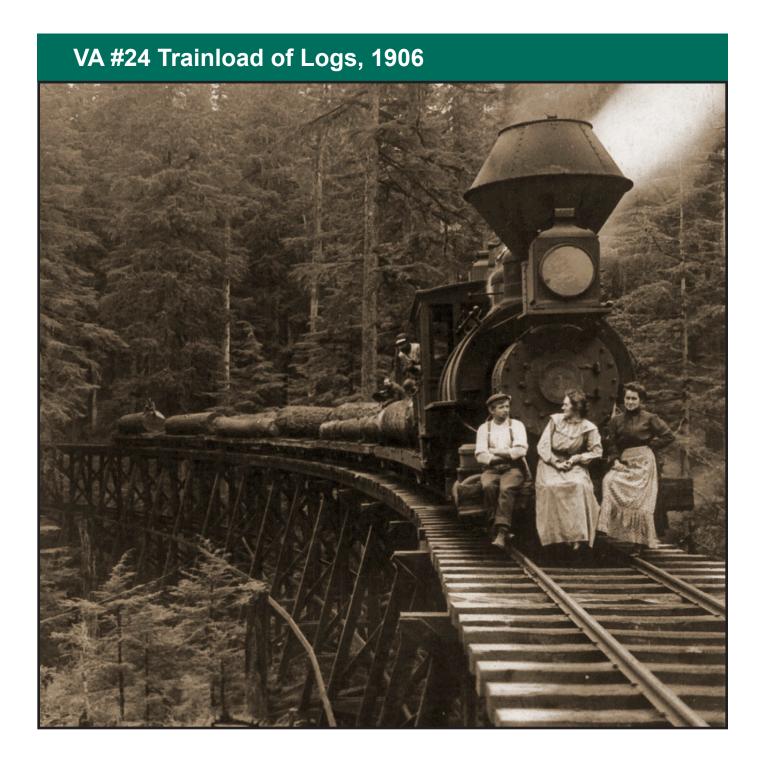


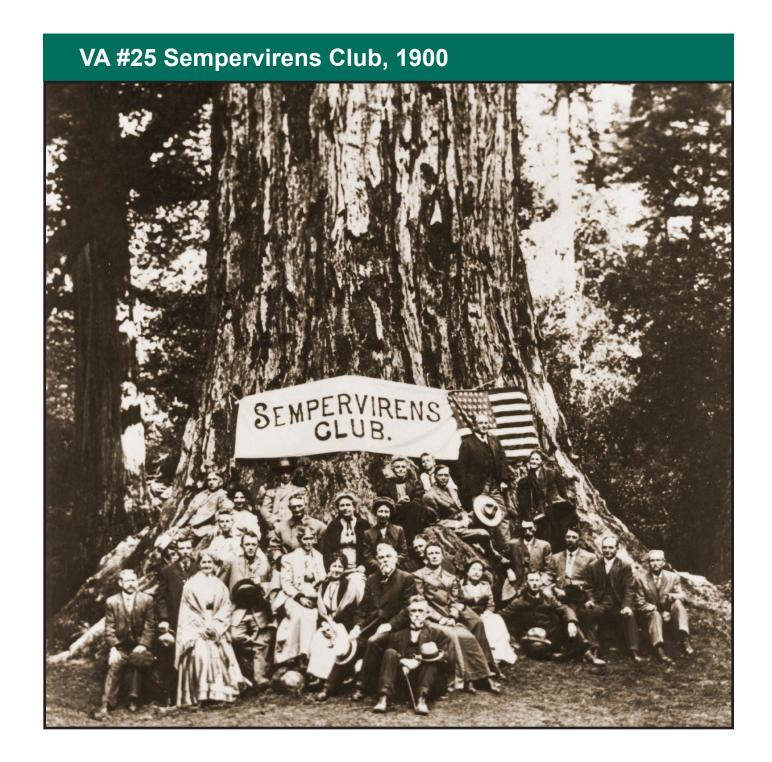
VA #21 San Francisco Development, 1869

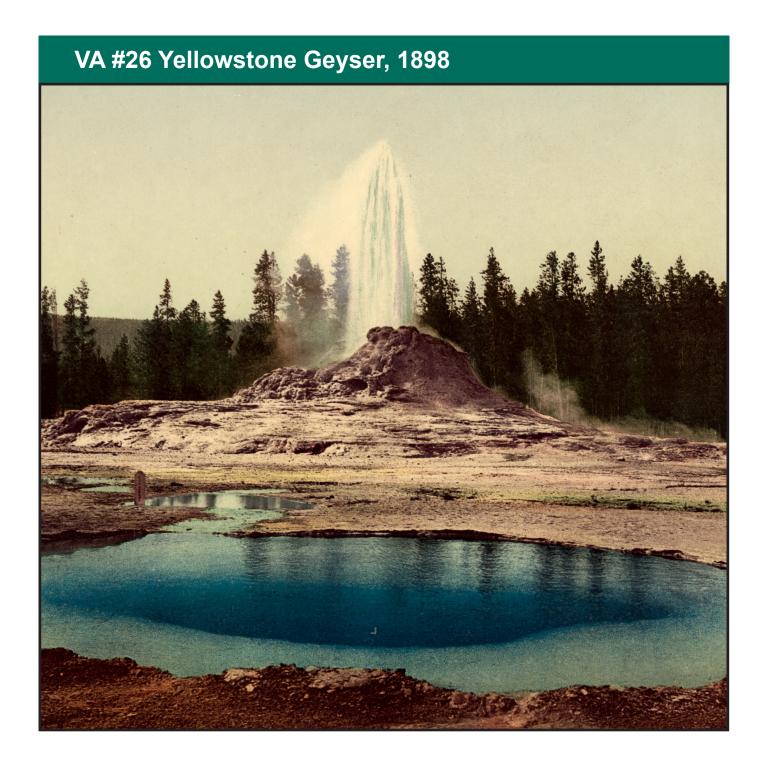












VA #27 Excerpts from the Conservation Conference 1

Declaration of the Conservation Conference

We the Governors of the States and

Derritories of the United States of America, in

Conference assembled do hereby declare the conviction

that the great prosperity of our country rests upon the

abundant resources of the land chosen by our forefathers

for their homes and where they laid the foundation.

of this great Nation.

VA #28 Excerpts from the Conservation Conference 2

We Look upon these resources as a heritage to be made use of in establishing and promoting the comfort, prosperity, and happiness of the American Deople, but not to be wasted, deteriorated, or needlessly destroyed.

VA #29 Excerpts from the Conservation Conference 3

We declare our firm conviction that this conservation of our natural resources include the land on which we live and which yields our food; the living waters which fertilize the soil, supply power, and form great avenues of commerce; the forests which yield the materials for our homes, prevent erosion of the soil, and conserve the navigation and other uses of our streams; and the minerals which form the basis of our industrial life, and supply us with heat, light, and power.

VA #30 Excerpts from President Roosevelt's Letter 1

President Theodore Roosevelt's Letter to Congress January 22, 1909

January 22, 1909

To the Senate and House of Representatives:

I transmit herewith a report of the National Conservation Commission, together with the accompanying papers. This report, which is the outgrowth of the conference of governors last May, was unanimously approved by the recent joint conference held in this city between the National Conservation Commission and governors of States, State conservation, commissions, and conservation, committees of great organizations of citizens. It is therefore in a peculiar sense representative of the whole nation, and all its parts...

VA #31 Excerpts from President Roosevelt's Letter 2

The great basic facts are already well known. We know that our population is now adding about onefifth to its numbers in ten years, and that by the middle of the present century perhaps one hundred and fifty million Americans, and by its end very many millions more, must be fed and clothed from the products of our soil. With the Steady growth in population, and the still more rapid increase in consumption, our people will hereafter make greater and not less demands per capita upon all the natural resources for their livelihood, comfort, and convenience. It is high time to realize that our responsibility to the coming millions is like that of parents to their children, and that in wasting our resources we are wronging our descendants....

VA #32 Excerpts from President Roosevelt's Letter 3

The function of our Government is to insure to all its citizens, now and hereafter, their rights to life, liberty, and the pursuit of happiness. If we of this generation destroy the resources from which our children would otherwise derive their livelihood, we reduce the capacity of our land to support a population, and so either degrade the standard of living or deprive the coming generations of their right to life on this continent ...

Dery sincerely,

President Theodore Roosevelt

VA #33 Studying Natural Resources in the 21st Century

For many years, the National Oceanic and Atmospheric Administration (NOAA) has studied the oceans, relying on ships and other equipment to help it. NOAA has also worked to maintain sustainable supplies of the fish that are important to the fishing industry.

In the 21st century, NOAA is gathering scientific information about new problems. Today the human population is growing quickly on the coasts and elsewhere. There is more trade and more pollution. Our global climate is changing, as are plant and animal communities. NOAA needs to study these problems because each one affects marine plants, animals, and ecosystems.

To answer key questions about protecting, restoring, and sustainably using marine resources, we must study many related fields. We need to study not only the ocean and the fish, but also marine ecology, poisons that harm marine life, genetics, and even how people organize their societies and make use of ecosystem goods and services.

NOAA still needs to study the oceans and manage the supply of fish, but it cannot do so without a greater understanding of complex marine ecosystems.

Adapted from comments presented to the Science Advisory Board of the National Oceanic and Atmospheric Administration (NOAA): Elliott A. Norse, Ph.D. President, Marine Conservation Biology Institute. July 1998





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